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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,862	03/15/2002	James J. Henschel	061408.3002-100	4474
30407	7590	04/26/2004	EXAMINER	
BOWDITCH & DEWEY, LLP 161 WORCESTER ROAD P.O. BOX 9320 FRAMINGHAM, MA 01701-9320			PATEL, TULSIDAS C	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/099,862

Applicant(s)

HENSCHEL ET AL.

Examiner

T. C. Patel

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*[Handwritten signature]*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 2/4/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☒ Claim(s) 6-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *General Status*

1. This is a Second **Non-Final** Action on the Merits. Claims 1-31 are pending in the case.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8, 16, 23 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claims 8, 16, 23 and 26, it is not clear what is meant by “conventional panel.”

### *Claim Rejections - 35 USC § 102*

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 14-17, 21-26 and 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Pan et al. (US 5,652,814).

For claims 14, 21 and 24, Pan et al. in figures 7 and 11, discloses an optical tap, WDM or splitter with optical fiber 72 taken an input fiber and optical fibers 70, 71 taken as output fibers. The figures also disclose coupler integral with the optical connector. The device functions as an optical tap, if filter is omitted and as WDM or splitter, if filter is present. For claims 16, 17 and 23, the disclosed device is capable of having bend radius of 1.5 inches.

The applicant is reminded that claim 14 recites ‘an optical tap’ and the recitation “a bend radius such that the device when coupled to an adapter in a conventional panel requires

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no additional frame space” in claim 16, does not positively recite ‘the panel,’ and ‘the frame space.’

Claims 22 and 26 also have similar recitation. For claims 28-30, embodiment of figures 6, 8 and 9 discloses the optical coupler with optical cables on both the sides and optical connector with splitter at the distal end of the fibers, for claim 30, the fiber cassette case is not positively recited.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18-20, 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pan et al. (US 5,652,814).

As discussed above, Pan et al. satisfies the limitations of claims 14-17. In so far as recitation of selection of substrate for the coupler is concerned, it is a matter of design choice. Also for claim 20, splitting function is already disclosed in the figures.

For claims 27, the method of fabricating the optical device is obvious to one of ordinary skill in the art including fusing, joining, curing and providing protective shroud or cover. Also, for claim 31, the particular wavelength that the fiber carries is a matter of design choice.

7. Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusuda et al. (US 6,644,866) in view of Pan et al. (US 5,652,814).

For claims 6-13, Kusuda et al. in figures 3-9, discloses an optical device comprising, a removable fiber cassette 95-100 (figure 3) 22 having a plurality of adapters 135 associated with it, an optical connectors 146 associated with the cassette. Some of the ports act as input ports and the other acts as the output ports. However, Kusuda et al. does not disclose the he connector to be coupler connector assembly. Pan et al. in figures 2, and 6-14 discloses coupler connector assemblies 33, 34 and 35, 36, inserted from two sides of the adapter (adapter shown in dotted lines), the coupler connector assembly 33, 34 having two input optical fibers 30, 31 and the coupler connector assembly 35, 36 having two output fibers 39, 32. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connector of Kusuda et al. and use coupler connector assembly as taught by Pan et al. so that two frequencies can be transmitted through an adapter port.

For claim 9, the bend radius is a matter of design choice. For claim 10, figures 8 and 21 disclose units with front and rear compartments, the frame acts as a bulkhead and connectors are mounted with the adapters in the cassette. The missing element of coupler connector is supplied by Pan et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connector of Kusuda et al. and use coupler connector assembly as taught by Pan et al. so that two frequencies can be transmitted through an adapter port.

***Allowable Subject Matter***

8. Claims 1-5 are allowed.

*Response to Arguments*

9. Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

The applicant amended claims 1, 6 and 10. The Examiner has revised the rejection, now based on Pan et al. and combination Kusuda et al. and Pan et al. Some of the claims are now being rejected on Pan et al. under 35 USC 102. Since the Examiner has changed the rejection of un-amended claims, the rejection is made Non-Final. Claims 1-5 have been declared as allowable. Since the rejection is now based on different art, the arguments are moot. Kusuda et al. disclose the removable cassette and Pan et al disclose the coupler connector.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. C. Patel whose telephone number is (571) 272-2098. The examiner can normally be reached on 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 271-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



T. C. Patel  
Primary Examiner  
Art Unit 2839

Tcp  
April 18, 2004